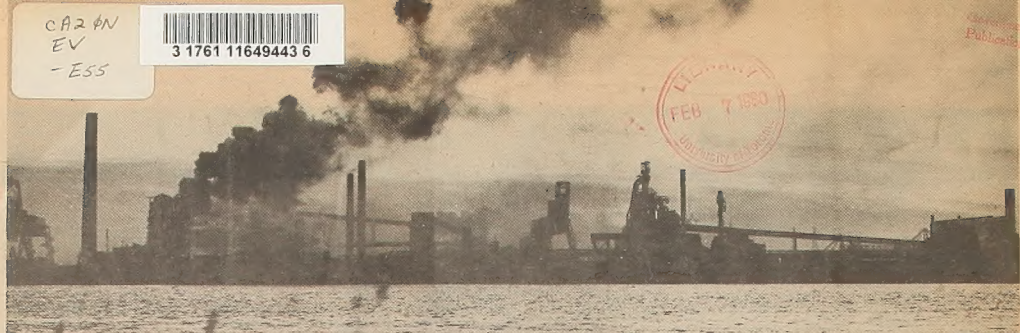


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Environment
Publication



(photo: Teena Barbara)

Parrott: Ontario determined to control acid rain

Public concern over the effects of acidic precipitation on the environment was demonstrated vividly at the first Action Seminar on Acid Precipitation held in November in Toronto.

Organized by 37 Canadian and U.S. environmental groups, and sponsored by the Federation of Ontario Naturalists, the event was expected to attract about 350 delegates.

Instead, about 750 participants came from both countries to listen to experts dealing with all aspects of the phenomenon and to demand immediate action from governments to control acidic precipitation.

Ontario's Environment Minister Harry C. Parrott and Deputy Minister Graham W.S. Scott explained in press conferences, in panel sessions and from the speaker's platform this province's action program and its role in the control of existing sources of acidic precipitation.

"We in Ontario have been committing substantial resources to the acid rain situation for more than 15 years," Dr. Parrott said.

Today, Ontario's priority objectives are:

- to prepare a state-of-the-art report on the acidic deposition phenomena.
- to determine the atmospheric transport and deposition of acid, metals and other relevant constituents.
- to determine the effects of atmospheric deposition on ecosystems.
- to develop effective air pollution abatement alternatives and

to implement efficient interim programs which will preserve and rehabilitate affected areas.

"Ontario, by its actions in the scientific studies and by encouraging public knowledge and participation, has demonstrated its determination to find solutions," Dr. Parrott said.

"The problems are immense. Many elements — including the huge emissions from the U.S. — are beyond our control. But we are doing our level best to share the load, and more."

Through abatement programs, Ontario has effectively reduced emission levels at major sources and is attempting to further reduce these levels as quickly as possible.

"We are lending the full weight of Ontario resources to the essential long-term objective of achieving agreements and abatement programs which are required at the international level," Dr. Parrott said.

Ontario's community-oriented abatement has reduced total sul-

phur dioxide loading by more than 650,000 metric tons per year since 1972, or close to 25 per cent, in spite of increased population and industrial growth. Deputy Minister Scott said at one panel session: The province will continue with short-term abatement measures while long-term solutions are being worked out, he said.

"However, we must face the problem on a scale that goes beyond our provincial boundaries — we can't do it alone. This is a continental problem. I believe progress is being made on a national and an international scale. The only firm basis for effective and

lasting pollution control must be sound research and a firm foundation of knowledge, not the present mixture of information connected by speculation."

Dr. Gregg Van Volkenburgh of Environment Ontario's air resources branch outlined in a speech the steps needed to develop an effective control strategy and explained the role of technological, social and economic input in the formulation of controls of acid rain causing emissions.

The impact of acid rain on our environment is generally measured by its effect on fish populations. An indication of its effects on the

sport fishing industry was given for the first time by Gerry Liddle on the basis of a study directed by Environment Ontario's water resources branch.

A survey of almost 2,000 fishing lodge operators revealed that sport fish populations in Northern Ontario have shown a steady decline during the past 10 years. Now only one fish is available for every five fishermen.

The loss may be partly due to over-fishing and to man-made fluctuations in lake levels, but acid rain is also an important factor. If the depletion continues, more than

(continued on page 3)

ENVIRONMENT ONTARIO — LEGACY

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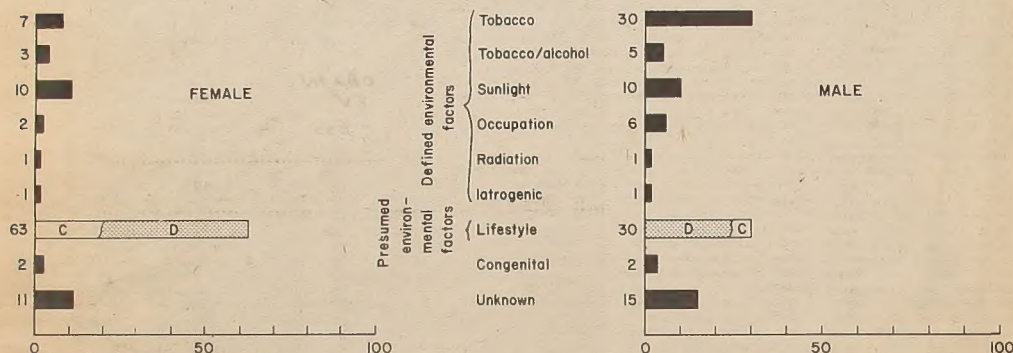
MOE crews on chlorine alert



Protected by breathing apparatus, an Environment Ontario technician advances toward the site of train derailment in Mississauga in November to collect samples of chloride-laden air. (See also pages 4 and 5)

(photo: Hans Eijgenck)

It's all one world...



Estimates of the proportion of cancer causes. The relative importance of dietary and cultural lifestyles are only a very rough estimate. Iatrogenic = induced inadvertently by a physician or his treatment. (Webster)

Environmental cancer causes widely misunderstood

"My conclusion, made in 1950, that most cancers had an environmental cause has been widely misinterpreted — not so much by fellow scientists as by chemical carcinogen people and especially by occupational people", said John Higginson in an interview published in the magazine Science.

Higginson is founding director of the World Health Organization's International Agency for Research on Cancer, and one of the world's leading cancer research scientists.

"When I used the term 'environment'," Higginson explained, "I was considering the total environment. That includes the air we breathe, the culture we live in, our agricultural, social and cultural habits, the social pressures, the chemicals we come in contact with, our diet and many other factors."

The ecological movement found it convenient to associate the term environment with chemical carcinogens. If they could make people believe that cancer was the result of pollution, this would make the clean-up of water and air easier.

"I am all for cleaning up the air and the water and for preventing Love Canals, but I don't think we should use the wrong argument for doing it," Higginson said.

To make cancer the whipping boy for every environmental evil may prevent effective action when it does matter, as with cigarettes. It would be easy to say: "let's regulate everything to zero exposure and we have no more cancer." The concept is so beautiful that it would overwhelm a mass of facts pointing to the contrary.

"You cannot explain much of the existing cancer patterns in terms of pollution by industrial chemicals in low doses. Geneva, for example, a non-industrial city, has more cancer than Birmingham,

in the polluted central valley of England."

Some discrepancies may be explained by differences in lifestyle. Overemphasis on chemical carcinogens, however, has distorted our approach to the environmental theory for many cancers.

Although Higginson has spent

many years in the laboratory studying the effect of combinations of chemicals, he could not find any indication that "small bits of different carcinogens add up to produce cancer." Some carcinogens even inhibit the action of others.

Research into the causes of cancer in humans should be directed at

other possible factors. "Among them are diet and behaviour," Higginson said. "But we simply do not know enough to advise legislation on changes in lifestyle."

Researchers have found, for example, that cancer of the colon is four times more common in Copenhagen than in Finland, al-

though lifestyles in the two countries are comparable.

Accordingly, the Danish government should tell Danes to eat Finnish food. But the Finns have the highest rate of heart disease in the world — so that would not be a solution either, Higginson said.

500 oil spills recorded

More than 500 oil spills were recorded around the coasts of Britain and Ireland in 1978, making this a record year for pollution incidents in the Atlantic, reports the Advisory Committee on Oil Pollution of the Sea.

The major incidents of the year, among them the grounding of the Amoco Cadiz off Brittany, tend to

conceal the fact that many small spills have a more serious long-term effect on the marine ecosystem than large ones. More than 10,000 birds were affected by the pollution incidents.

Despite the increase in spills, only one vessel was prosecuted by the Board of Trade for pollution offences within Britain's territorial sea.

High on lead

Low levels of asbestos and high levels of lead have been detected in Washington, D.C., subway stations. High asbestos levels were expected, because the material is used in train brake pads. High lead levels may originate from automobile exhaust emissions collected through subway air intakes situated at street level.

Trade secrets bar control of chemicals

The removal of barriers to the sharing of trade secrets among government agencies may protect the public from man-made chemicals, suggests a report of the Toxic Substances Strategy Committee in Washington.

Bees recover fast

The bee population destroyed in New Brunswick by the chemical Fenitrothion, used for the control of spruce budworms, has recovered much faster than expected, reports

the Department of Agriculture Research Station in Fredericton.

Despite strict controls, the pesticide attacked local blueberry fields and the honey bees on which the farmers depend for pollination of the plants.

Experts expected it would take the bees about 10 years to recover — but research has shown the situation returned to normal after three years.

EPA wants more money

To carry on its investigation of about 300 hazardous waste dump sites per year, the US Environmental Protection Agency has applied for supplemental appropriation of \$131 million for 1980. From the 300 investigations about 50 prosecutions per year are expected.

Up to now EPA investigators

have discovered 151 waste disposal sites containing potentially dangerous materials.

US Steel cleans up

After one year of intensive negotiations with the US Environmental Protection Agency the US Steel Corporation has agreed to spend \$400 million to clean up nine of its environmentally dirtiest plants in Pittsburgh.

In addition, the corporation will have to pay \$18.6 million in fines for past environmental violations. But the fines can be offset by the installation of equipment that would control pollution beyond the limits imposed by law.

The project, to be completed by 1982, will reduce particulate emissions by 50 per cent and water pollution of the Monongahela River by 90 per cent.



Ontario

Ministry of the Environment

Hon. Harry C. Scarott, D.D.S., Minister
Graham W.S. Scott, Q.C., Deputy Minister

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Editor Robert Koci

Director of Information Services R.J. Frewin

Man-made underground river starts to flow

by Mary Ellen Lewis

A giant underground river, extending from Pickering to Unionville, will begin carrying sewage from York and Durham to the Duffin Creek treatment plant in early 1990, as Stage I of Canada's largest single planned sewage system starts operation.

Stage I operation of the plant at a 180 million litres (40 million gallons) per day capacity allows the closing of five existing treatment plants, currently discharging waste into the Rouge River, Duffin Creek and Lake Ontario. By 1986, seven more plants will be out of service and the single Duffin Creek plant will serve the two regions, expanding to a capacity of 640 litres (160 million gallons) per day after the year 2000. Communities throughout York and Durham can now plan their residential and industrial development in accordance with a system prepared to serve more than 400,000 people in each region, and to service 17,000 acres of industrial land.

"We're looking at an estimated third of a billion dollars of sewage system constructed over a 30-year period — 110 kilometres (70 miles) of trunk sewer ultimately large enough to carry the combined flows of the Don and Humber rivers on an average day," said Deputy Environment Minister Graham W.S. Scott.

Despite its size, the York-Durham system maintains a low profile. The ministry's objective throughout design and construction stages has been to minimize environmental disruption and restore original landscapes.

"Gravity flow sewers are the most economic, so we've had to follow river valley and ravine land to take advantage of the land's natural slope," said Mr. Scott. "But so far we've been successful in restoring physical and biological environments, and local residents continue to use the land for recreation."

This has called for creative and innovative approaches to construction. The trunk sewer passes through natural ravines and golf courses, across a supermarket parking lot and major highways, all of which now bear no construction scars. Construction work and trucking were confined to the immediate work area.

Advanced construction technology was widely used. At the Duffin Creek plant site, an innovative rock tunnel boring machine chewed its way through 1200 metres (3,600 feet) of shale 40 metres (125 feet) below the lake floor, using a ruby laser beam to stay on target and closed-circuit television to make sure all was clear before a clamshell scoop removed shattered shale.

The crushed rock is now the foundation for an attractive, rolling plant landscape while below ground a three-meter (ten foot) diameter discharge pipe extends about one kilometer (three-quarters of a mile) into Lake Ontario.

Treated effluent eventually discharged through this pipe at Duffin Creek into Lake Ontario will be of the highest possible quality. Deteriorating water quality in the Don, Rouge and Holland rivers as well as Duffin Creek was the major concern behind the preliminary studies which recommended the York-Durham system, and the plant's use of state-of-the-art technology reflects this concern.

Interim expansion to existing plants has provided some relief to the rivers, but as sewage flow is diverted to the new trunkline and plant, water quality will substantially improve. The three-meter (ten foot) diameter sewer, running mostly in a tunnel five to 25 metres (15 to 75 feet) below the ground, is about 75 per cent complete. It will reach Woodbridge on the west and Newmarket to the north, through Pickering and Ajax, on completion in 1986.

D.N. Jeffs, director, water resources branch

The appointment of Donald N. Jeffs as director, water resources branch Environment Ontario, has been announced by Deputy Minister Graham W.S. Scott.

Mr. Jeffs joined the Ontario Public Service in 1960 as a hydrogeologist with the Ontario Water Resources Commission and has been assistant director of the water resources branch since 1974. He also was a member of the International

Reference Group on Great Lakes Pollution from Land Use Activities under the International Joint Commission.

Steve Salbach has been appointed assistant director of the water resources branch. Mr. Salbach has been with the OWRC and the Ministry since 1961 and will continue in his role as supervisor of the planning and co-ordination section of the branch.

Acid rain ... (continued from page 1)

6,000 jobs out of almost 20,000 available in Northern Ontario in the resort industry are in danger.

Within the next 20 years, some 600 lodges may be seriously affected with a loss of an estimated \$28 million yearly to the fragile northern economy.

At the conclusion of the two-day symposium it fell to Dr. Parrott to point out to the audience the one basic and much-overlooked cause of acid precipitation.

"We have spent two days discussing the acid rain problem in overheated and over-illuminated meeting rooms," Dr. Parrott said, "and it is now about time to realize that it is our excessive demand for amenities, our affluence, that lies at the root of the problem. The battle against acid precipitation will not really be won until we adopt a healthier lifestyle — healthier for us, and healthier for our environment."



Workmen complete final fitting at a screw-lift pump at the Duffin Creek sewage plant.

photo: Hans Kijewski

Environment Ontario staff on 'r



Aerial photo of derailed tank cars in Mississauga was taken one day after the accident. (photo: Ron Johnson)

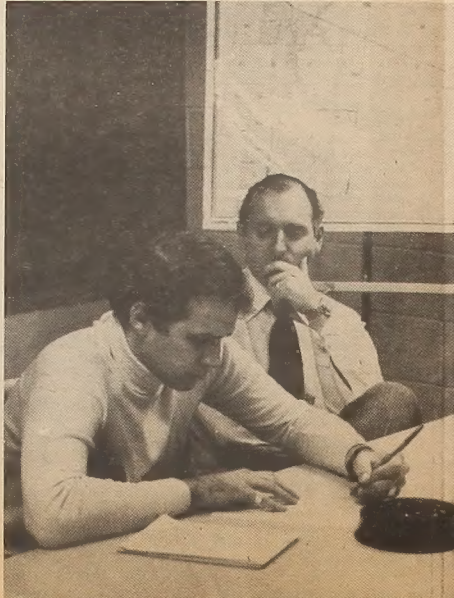
Environment Minister Harry C. Parrott, Deputy Minister Graham W.S. Scott and Environment Ontario staff responded to the crisis facing Mississauga when 25 cars of a CP Rail freight train derailed November 10.

Under the emergency task force headed by Solicitor General Roy McMurtry, Environment Ontario staff assumed responsibility for:

- Monitoring air and water for contaminants from wrecked and burning cars.
- Collecting data as the basis for all decisions affecting public health and safety.
- Supervising the safe, effective removal and disposal of contaminated soil.

Dr. Parrott praised his Environment Ontario team's professionalism and "team effort in this difficult and dangerous situation."

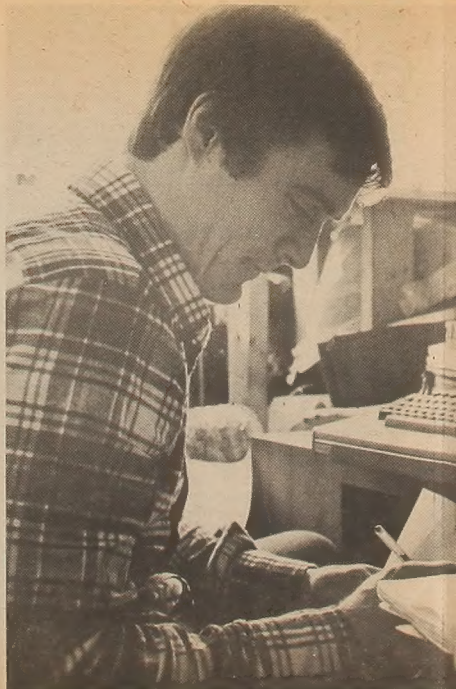
Here, in pictures, is part of the story of that effort.



Air monitoring expert Gregg Van Volkenburgh (above left). In the photo, Deputy Minister Graham W. Scott and Solicitor General Roy McMurtry spent long hours evaluating the available information. Environment Ontario staff were also concerned.



The "super sniffer" TAGA 3000 on location with extended air sampler. In the background the TAGA 2000 moves to a new position. (photo: Hans Eijerick)



In the TAGA 3000, technician John Fulford monitors reading on air contaminant

round the clock vigil



photo on the right Mississauga Mayor Hazel McCallion and Environment Minister Harry C. Parrott discussed problems concerning the safety of the inhabitants of the area. (photo: John Harquail)



(photo: John Harquail)



(photo: Hans Kijerck)



Barney Singh, manager, technical support section, Dr. Gregg Van Volkenburgh, co-ordinator, Colin Macfarlane, director, central region, and George Trewin, manager, municipal and private abatement, central region, plan monitoring strategy. (photo: Hans Kijerck)

Environmental education

Beginning with this issue, *Legacy* will again carry an educational page to offer our readers suggestions on how to explain environmental problems to young people.

The page will include experiments, ideas for projects, letters, teaching suggestions and a listing of coming events.

Some teachers are already beginning to plan for coming Science Fairs. If you have any tips for running the event or project ideas, please write and let us know so that we can pass your experiences on to others.

Similarly, if you have any ideas for the page, suggestions or questions on teaching ideas or ministry activities, please drop us a line and we will try to respond.

Write to:

Educational Resources Co-ordinator,
Information Services Branch,
Ministry of the Environment,
135 St. Clair Ave. West,
Toronto, Ontario
M4V 1P5



(photo: Ron Johnson)

Snowmobile's impact on the environment

We have loosed a mechanical creature upon our winter landscape which weighs from 215 to 650 pounds and has the strength of from nine to 80 horses.

This mechanical creature is changing. A look at the near future sees him with a larger and heavier stature and even more power. His evolution is also freeing him from his restriction to snow-covered areas. He will soon be found year-round with wheel attachments for easy conversion to dry land use.

The following studies are designed to reveal the environmental impact of this creature, the snowmobile.

Select trails in an easily accessible

area. Some effort should be made to categorize the study trails with respect to age or use. Differentiation might be simply "heavily trafficked", "lightly trafficked", and "one time use". The "one time use" trail should be made by the investigators and used for comparison.

A more controlled study might involve setting up a monitoring system to establish an average number of snowmobile uses per day. If a counting device can't be constructed or obtained, a few hours spent actually counting machines at various times during the day could be completed and per day data estimated from these sample counts.

the snow is level with the rim of the can. A ruler or thin piece of wood can be used to slice along the lower rim.

3. Insulation — As snow becomes more and more compacted, its ability to insulate is altered. Fairly sensitive thermometers should be used for this investigation. Take temperature reading at various levels in the snow, i.e., surface, 1/3

depth, 2/3 depth, and ground surface. If you have a soil auger, continue your readings as far as possible into the soil. Can you determine frost depth in the soil?

Always compare trail readings with readings taken away from the trail. Always record air temperature. Again, variability in the trail might be studied; i.e., hills, curves, etc.

type of living material between the samples?

3. Small Mammal Impact — During certain spring thaw conditions field mice runways are readily visible. By roping off an area, a simple grid map can be made of these surface runways and their contents. It is a fascinating activity.

Students should have trowels or sticks for lifting off the snow crusts and plastic bags for collecting scats or other interesting things that might be present in nests, runways, or storage chambers. Students must work carefully and slowly from one section of the plot to the next.

As a comparison, locate a similar type of field which has been heavily used by snowmobiles. Try to conduct the same investigation and compare results.

After studies such as these, young people will still use the snowmobile. The excitement, thrill and human companionship of snowmobiling will still be there. However, they might use them with more caution. They might also be more receptive to future snowmobile regulations designed to protect the environment.

Biotic impact

1. Woody Vegetation — The quantity and quality of vegetation damage can be investigated. Establish percentage of damaged branches from bushes and young trees in the trail. Qualify this data by collecting and interpreting it in terms of type of damage done, i.e., skinned bark, branch broken off, branch cracked, etc.

2. Leaf Litter — The effect on leaf litter is approached from two directions: (a) what is the physical character of the litter, and (b) what is the biotic potential. Leaf litter samples must be gathered from several points along the trail and compared with litter gathered from

adjacent non-compacted points. Take samples that include soil material.

The physical character observations might include: "Is the litter frozen in a clump or loose and light? Are there ice crystals in the litter? Does the trail sample differ from the adjacent sample in the leaf particle size?"

Samples should be taken back to the classroom and kept moist in a container in the sunlight. Sort through the litter periodically. Do any insects, spiders, sow bugs, worms, and snails appear? Do any seedlings sprout? Are there any differences between the quantity or

Snow compaction

1. Depth of Snow — Snow depth on snowmobile trails compared with depth on untracked snow can be used as an indicator of snow compaction. A yardstick or, even better, a marked sharpened lath will suffice as a measuring device. Compute average of several measurements; consider differences in snow compaction at points on the trail where the machine's power is increased or decreased, i.e., cor-

ners and hills.

2. Water Content — Compacted snow will contain more water per unit volume than its non-compacted neighbor. To determine water content, take snow samples in a certain volume size container, allow it to melt and compare quantities of water.

Soup cans cut out at both ends work well for taking samples. Shove the can into the snow until

Queen's Park recycles mountains of paper

The success of Project Paper Recycling operated for the past year at the head office of Environment Ontario has led to the expansion of the project to 14 Ontario Government buildings located mostly in the Queen's Park area of Toronto.

The project calls for the collection of all used high-grade, white bond paper by government employees in containers placed on every desk. Whenever convenient the employee then takes the waste paper to a larger floor container, from which it is collected daily by the office cleaning staff and conveyed to a storage area. From here it is picked up by a contractor for resale to paper mills. At the mill, the paper is de-inked, pulped and re-used for the production of paper.

Recycling is limited to high-grade, white bond paper because this is the type mostly used in government offices. Experience gained during the past year at Environment Ontario offices has shown that on the average 0.3 to

0.4 lbs of such paper can be collected daily by each employee.

Since the introduction of the project the response of employees has been enthusiastic. During July, August and September about 23 tons of paper were collected from

11 ministries participate

government offices, although not all offices were as yet participating. As the project expands this amount is expected to increase significantly.

To introduce the project, Environment Ontario contracted the services of E.A.C. Amy & Sons Ltd., a management support services company involved in the start-up of a similar project in federal government offices in Ottawa.

H.E. (Ted) Brown and Alex M. Watson of E.A.C. Amy co-operated closely with Environment Ontario's waste management branch and held 54 briefings for employees of the 11 participating ministries and government organizations, supervised the placement of collection containers and instructed office cleaning staff.

During the next months they will also monitor the collected material to ensure its proper quality and prevent its contamination by non-recyclable materials.

The contract for the collection and resale of the paper has been awarded to J.C. Waste Management Ltd. of Mississauga. To prevent the accumulation of large amounts of combustible material, collections are made nightly between midnight and 7 a.m.

In 1977 Canadian paper mills imported 365,000 tons of waste paper at a cost of \$33 million mostly from the Boston, Mass., area. In 1978 609,000 tons were imported at a cost of \$57 million, or nearly \$100 per ton.

Since the introduction of the paper recycling program in Ottawa, more than 600 tons of this resource have been collected monthly from federal government offices. Ontario's Project Paper Recycling will further contribute to the reduction of such imports. In addition the amount of office waste up to now discarded in landfills will be considerably reduced.

Following the example of the

Ontario Government a number of large private organizations are planning to introduce similar projects in their office buildings. A "Guideline for the Implementation of Office Waste Paper Recovery Systems" is available from the Ontario Government Book Store at 880 Bay St., Toronto, or from Environment Ontario's information services branch, 135 St. Clair W., Toronto, M4V 1P5.

"Pitch-in" day set for 1980

Thousands of volunteers from service clubs, schools and other organizations will pitch-in on Saturday, June 7, 1980 on local environmental projects, including the clean-up of litter and junk from streams, rivers, lakeshores, backroads and byways, campsites and other areas which lack regular collection services.

The "Pitch-in" day is organized by the 20,000-member Federation of Anglers and Hunters with the support of the Ministry of the Environment.

Promotion for the clean-up project will include a major advertising campaign to be staged by Environment Ontario in early spring 1980.

One (empty) bottle a day may make Don rich



Don Lynk often works 18 hours a day loading recyclable paper and glass onto his truck. (photo: Rita Devgan)

by Rita Devgan

"If every home in Brampton would contribute one bottle every week I'd be a millionaire in two years," claims Don Lynk, owner and operator of Don's Glass Salvage, a recycling business founded to collect glass, newspaper and cardboard in and around Brampton.

Don's Glass Salvage is one of the few private operations based on the growing trend toward recycling waste. Various large organizations have become involved. The City of Toronto has been collecting old newspaper separately from other garbage for several years. Toronto has also started an experiment in the Lawrence-Yonge Street area,

in which 1,000 homeowners are asked to sort glass and cans into separate containers for a special pick-up on Wednesdays.

In the same area, Ontario's Waste Management Advisory Board is running a project in which about 100 homeowners were supplied with composters and invited to separate biodegradable refuse from their garbage, and to compost it for use in their gardens.

Don Lynk and partner Sandra Fontaine got the idea for their business when they saw a woman discard returnable pop and beer bottles with her household garbage. It was too inconvenient for her, they

found, to take all the empties back for a refund.

To start with, Don decided to buy returnables from households for half the deposit value and to return them to stores in bulk. After initial success, he expanded his operation to the collection of non-returnables for recycling by glass manufacturers.

He started out with a car, a couple of metal drums and the idea that, to get exclusive collection rights to empties discarded by taverns and restaurants, he would have to talk money. So he explained to the operators how they could save the costs of storing empties

and of having them collected as waste.

The plan worked. Don now picks up empties at several restaurants in Brampton and at some high-rise apartment buildings, in which management can also save on collection and disposal costs. In the beginning Don worked days at his own business and nights on his regular job with a transport company.

After about a month the income from his enterprise allowed him to quit his job, buy a truck, hire an assistant and several employees to promote their business by telephone. And the business is still growing.

The collection of glass remains the mainstay of the operation, but now Don also collects newspapers and cardboard anywhere within 25 miles of Brampton. The cardboard is sold to a company as raw material for the production of flat paper for roofing and for the manufacture of chipboard. Newsprint is transformed by another one of Don's customers into insulating material.

Pop bottles are returned to bottlers, beer bottles to brewery retail stores, and non-returnable bottles and other glass refuse to a glass manufacturing plant in Brampton.

The energy Don puts into his enterprise is an important ingredient of his success. He is up at 7 a.m. and regularly puts in an 18-hour day. He does not mind lugging bins of bottles down two flights of stairs at the restaurant of a "good customer" — one who provides him with a daily load of bottles sorted by color.

Restaurant managers are especially co-operative. They found Don's enterprise saves them a lot of trouble.

Household collections work, Don explains, mainly because people are lazy. "But their laziness is what makes my business grow."

After overcoming initial difficulties, Don even found enough

time to develop sidelines. On several occasions he has rescued a discarded bicycle from somebody's trash. After tinkering a bit with it he delivered it in perfect condition to the Children's Aid Society.

Sometimes he transforms attractive liquor bottles into lamps to be given as gifts to friends and customers.

The ecological motive was a secondary consideration in Don's decision to start a recycling business. "More than anything else I wanted to be my own boss," he says. "And, maybe, in some sense, become known in the area."

That he has done. People greet him with a friendly "Hello!" when he comes to pick up a batch of bottles, and watch that nobody else picks up "his" bundle of old newspapers.

But the ecological motive is still there. "I was raised and worked on a farm," Don says. "And it bothered me to see some 200 or so acres of prime farmland go to waste when they became a landfill site."

The thought of 10 men running \$500,000 machines to move good backfill to bury layers of garbage still gets him talking even faster than his usual 500 words per minute.

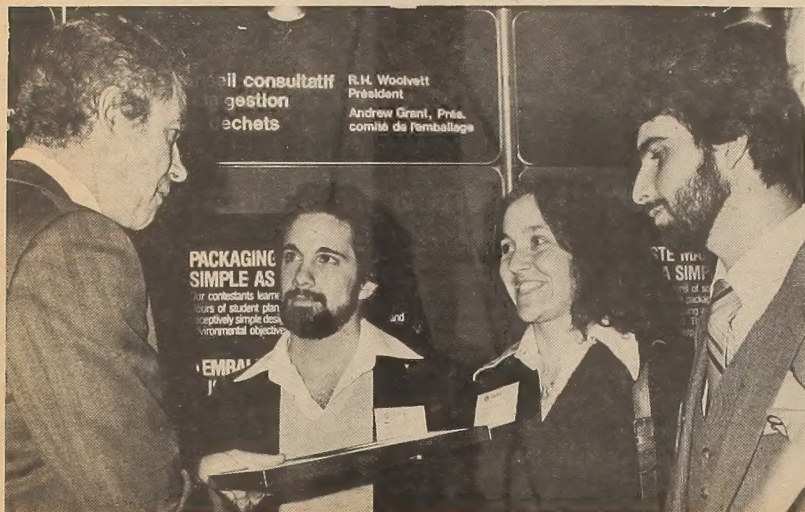
In the end, however, what motivates Don is not as important as his contribution to the solution of one of the problems of our time, the reduction of the mountains of garbage generated in our communities.

In addition, Don's Glass Salvage also helps to spread word that recycling of waste is not only environmentally sound but that it can also be economically profitable.

For anyone wishing to take advantage of Don's services, here is his address:

Don's Glass Salvage,
167 Church Street East,
Apt. 101,
Brampton, Ont. L6H 1H4
Tel.: 459-4527

First environmental packaging prizes awarded



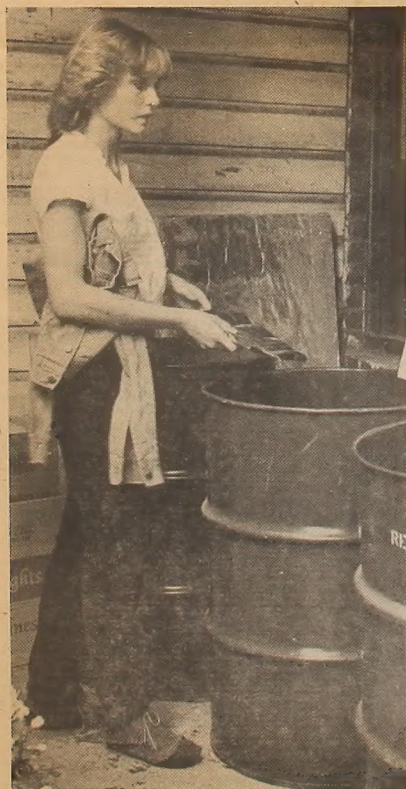
(photo: Hans Eijer)

Winners of honorary mentions in the first environmental packaging competition sponsored by Environment Ontario and the Province's Waste Management Advisory Board are presented with award certificates by Environment Minister Harry C. Parrott at the Ministry's booth at PAC-EX '79, the Canadian National Packaging Exposition held October 15-18 at Exhibition Park, Toronto.

Humber College packaging design students are, to right of Dr. Parrott, Peter Colgani, Anne Williams and Bruce Carroll.

Since today post consumer packaging materials account for over 30 per cent of municipal solid waste in the Province, Dr. Parrott said, his Ministry feels strongly that it is important for tomorrow's industrial designers to apply design factors that take into account the productive life of a package and its ultimate disposition after use, in order to reduce the amount of municipal solid waste.

Is Five sells conservation supplies



The supply of materials and services to people interested in the conservation of energy and resources is the main aim of a unique "Conservation Store" in Toronto. Attached to the store is a depot for the collection of glass and paper for recycling.

Among the items offered for sale are composters, reusable shopping bags, recycled paper products, firewood recovered from waste wood. Other products are related to

heat and water conservation, organic gardening, insect control, nutrition, fitness and transportation.

The store will also serve as a clearing house by referring customers to contractors or organizations able to fill conservation needs, and will provide literature on a wide range of topics.

The Conservation Store is operated by the Is Five Foundation, and organization devoted to the deve-

lopment of a conservator society. The Foundation's name is derived from the concept of synergy, according to which the whole is greater than the sum of its parts — a concept expressed in the formula: two plus two is five.

The store is situated at 477 Dupont Street, and is open Monday to Saturday from 10 a.m. to 6 p.m., Thursdays and Friday till 9 p.m. Telephone: 531-3548.



Shery Robertson, Lori Foulton and Gord Akita (l. to r.), students at Donview Junior High, are doing some research for a school project at the Conservation Store, while schoolmate Jennifer Kent (far left) contributes flattened cans to the store's recycling depot.

(photo: Tomi Bachan)